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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,649	06/13/2001	Timothy P. Near	NOR-977A	5894

37172 7590 09/16/2003

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EXAMINER

CARTAGENA, MELVIN A

ART UNIT PAPER NUMBER

3754

DATE MAILED: 09/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/880,649

Applicant(s)

NEAR, TIMOTHY P.

Examiner

Melvin A. Cartagena

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,812,355 to Nojima in view of US 4,878,147 to Oyama et al.

Nojima discloses a dispenser for dispensing fluid onto a substrate with a solenoid-actuated dispensing valve, power supply, and driver circuit along with associated method, but is silence about the driver circuit initial peak current having a duration determined by the inverse function of the output voltage of the power source. Oyama discloses a similar driver circuit with initial peak and holding currents with the duty ratio reduced inversely proportional to the power supply voltage. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have used the driver circuit of Oyama with the fluid dispenser of Nojima in order to overcome the problems of different values of the power supply from a production efficiency standpoint as taught by Oyama, see column 1, line 12 to column 2, line 18.

3. Claims 1-4 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,812,355 to Nojima in view of US 5,737,172 to Ohtsuka.

Nojima all claimed features as discussed above except for the driver circuit initial peak current having a duration determined as an inverse function of the output voltage of the power supply. Ohtsuka discloses a similar driver circuit with initial peak and holding currents with the

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pulse width for a voltage value decreasing in inverse proportion to the power supply voltage. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have used the driver circuit of Ohtsuka with the fluid dispenser of Nojima so that the absorbing force and an input to the coil can be maintained at a constant level, irrespective of the voltage as taught by Ohtsuka, see column 4, lines 54-59.

### ***Response to Arguments***

4. Applicant's arguments filed July 31, 2003 have been fully considered but they are not persuasive. The device of Ohtsuka discloses a electromagnetic contactor with pull and hold currents as depicted in drawing 6(f) where the coil inputs are variable in response to fluctuating supplied voltages, see column 3, lines 62-67. In addition the pulse width for the voltage value responses in inverse proportion to the voltage value, see column 4, lines 55-59. Oyama shows a drive signal with a time variable component, as depicted in Fig. 2B, determine by a non-constant voltage, see column 2, lines 1-18.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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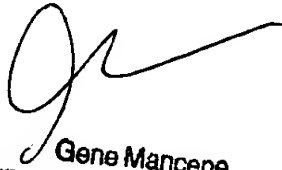
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (703) 308-5810. The examiner can normally be reached on M-F (7:30AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Louis G. Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

MAC 9/9/03  
MAC

  
Gene Mancene  
Supervisory Patent Examiner  
Group 3700